VADOplex® by OPED
FOOT PUMP SYSTEM

User manual

OPED – to make you stay mobile
OPED is specialized in medical technology that gets patients back on their feet more quickly after injury. We care for patients with a whole range of orthopedic rehabilitation products. All orthoses are developed and manufactured in Germany. With a great spirit of innovation, OPED is working to ensure that doctors can offer their patients optimum care with highly functional treatment concepts.

OPED

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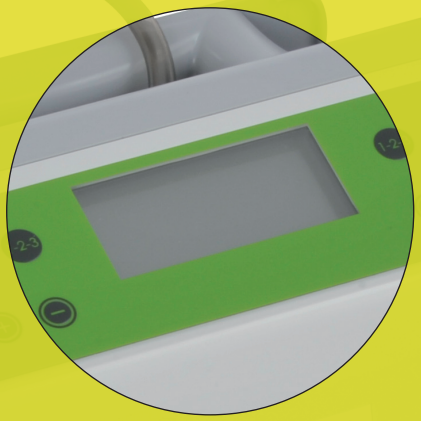

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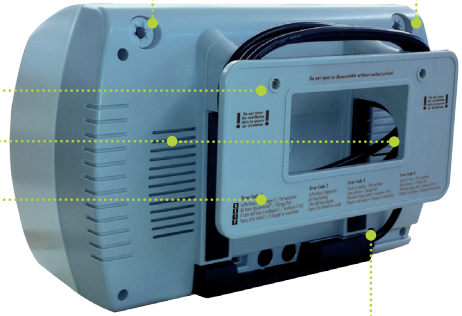
Table of contents

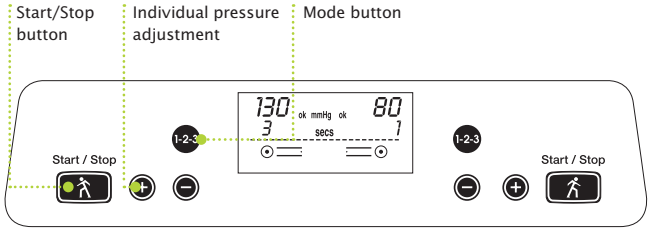
Control panel

Device description
Front side

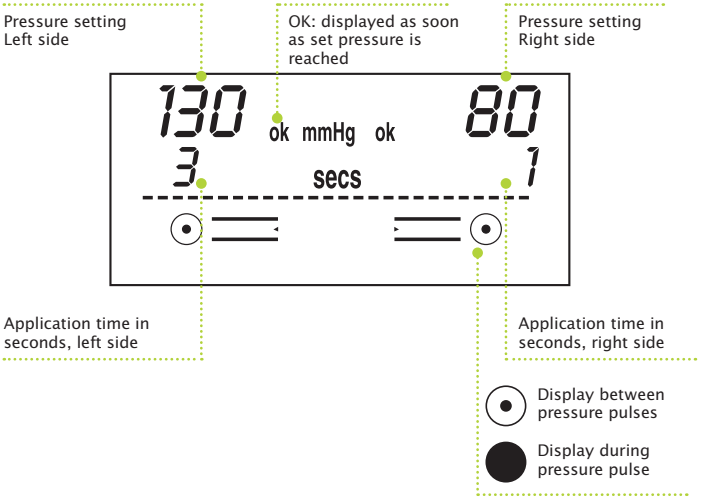
Rear side


Two tube connections to the garments (pads)
Transport handle and bed mounting
Ventilation slots
Information on error messages 1-4
Supply cable connection

Control panel buttons



Display information



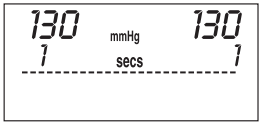
Getting started

1. Plug the two connecting tubes into the corresponding sockets at the rear side of the device, one on the left and one on the right.
2. Plug the supply cable into a power socket.
3. Attach the VADOplex garments (pads) and make sure that they are positioned properly (see user manual supplied with pressure sleeves). The pads are to be used for one patient only and may neither be used for several patients nor refurbished.

Control panel

4. Connect the transparent tubes of the VADOplex pads to the connecting tubes of the VADOplex device

5. Switch on the device with the toggle switch at the front and wait until the following is displayed:



6. Press the start/stop button to start the therapy.
   By pressing the start/stop button during therapy, you can interrupt the procedure for a break. Pressing the button again reactivates the device.

Set mode via

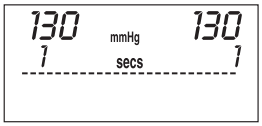
1-2-3

Individual pressure regulation with

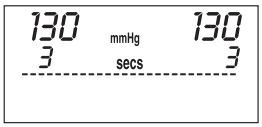
⊖ ⊕

With the 1-2-3 button, you can choose from 3 basic modes:

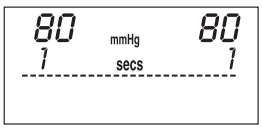
Standard mode
130 mmHg for 1 second
for application at the foot



130 mmHg for 3 seconds
for application at the foot
in case of arterial circulatory disorders*



80 mmHg for 1 second
for application at the hand



The factory set standard mode is 130 mmHg for 1 second.

Always chose the modes by pressing the 1-2-3 button only!

If you want to delete your settings, simply switch off the device with the toggle switch and then switch it back on.

*Note: If 3 seconds application time is set up for both sides, the interval between the impulses will raise automatically from 20 seconds to 50 seconds!
(due to slower venous refill time with arterial diseases)

Indications

Intended use

Device for improvement of the venous return and arterial flow with intermittent, pneumatic impulse compression on the upper and lower extremity. It is equally suitable for specialist staff in hospitals as well as for application at home, with the patient or his relatives using the system themselves.

Indication	Recommended application time
For quick drainage of acute edema of the upper and lower extremities (e. g. post traumatic and postoperative) Especially suitable for fractures in the area of the ankle and wrist After compartment syndrome Shoulder injuries and surgery	post traumatic: continuous (with breaks if required) postoperative: 6 to 8 hours daily (with breaks if required)
For quick drainage of chronic edema of the legs and arms (e. g. chronic lymphedema, chronic venous insufficiency)	At least 4 hours per day with breaks if required over several weeks
For compartment prophylaxis in case of serious soft tissue damage	Continuous, without breaks
Prevention of deep vein thrombosis; when used solely (e. g. in case of HIT or heparin intolerance)	At least 11 hours per day, gradually reducing the application time until full load is possible
Prevention of deep vein thrombosis; as additional measure to anticoagulant drugs or for low risk patients	At least 6 hours per day in the high-risk phase, gradually reducing the application time until full load is possible
Chronic recurrent ulcera cruris (arterial, venous, mixed) Venous congestion	At least 4 hours per day with breaks if required over several weeks
Diabetic foot syndrome / ulcers	At least 4 hours per day with breaks if required over several weeks
Peripheral artery occlusive disease (PAOD) and arterial circulatory disorders of the extremities	At least 4 hours per day, with breaks if required over several weeks

Contraindications:

For the following types of patients, risks and benefits have to be assessed:

Patients whose heart could be impaired by an increased reverse current, patients with decompensated cardiac insufficiency, acute deep leg vein thrombosis or pulmonary embolism as well as thrombophlebitis or massive infections of the extremities treated. If you have any question, please ask your doctor.

Alarms / trouble shooting

Error code 1
Air tube disconnected? / exchange pad

Error code 2
Air tube bent?

Error code 3
Pressure too low – exchange pad

Error code 4
Pressure too high – exchange pad

Application note

Do not expose the VADOplex device to extreme temperatures, water or humidity. Do not drop the device and do not use force trying to open it. Should one of these events happen, have the device inspected by an authorized service technician.

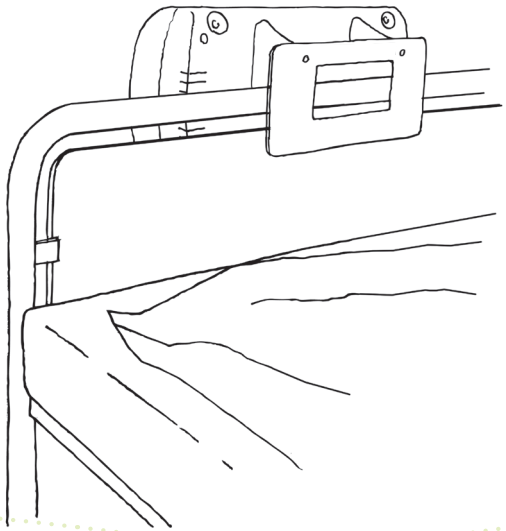
Opening the housing or exposing the device to humidity/dampness creates a risk of electric shock.

Using the device near inflammable gases can cause explosive incidents. Do not place the device in the vicinity of such gases.

The device may only be used with the pads intended.

The pads have to be disposed of properly by medical staff.

Attaching the VADOplex at the hospital bed



Cleaning, maintenance and technical service

Only employees, who have undergone the corresponding technical training from the manufacture are authorized to open the device and perform maintenance tasks.

The VADOplex system has to be maintained every 3000 operating hours or at least once a year. During maintenance, the hardware and software of the device is inspected, wear parts are checked and, if applicable, exchanged or cleaned. This inspection requires special training to ensure smooth operation of the VADOplex systems.

Thus, maintenance tasks and technical procedures at the VADOplex system may only be performed by authorized technicians. Otherwise, the manufacturer does not assume any responsibility for the use and effect of the VADOplex system.

The case of the device and the connection hoses can be wipe-disinfected with standard disinfectant agents for hospital use or alternatively with a 1% sodium hypochlorite solution.

Residues of alcohol and sodium hypochlorite, remaining on the surfaces after wipe disinfection, must be removed with a water moistured cloth.

The user/patient does not have to clean the device. This is done by the service staff during maintenance/repair.

The VADOplex system does not have to be sterilized.

You can simply wipe the housing and connection tubes with common disinfectants.

On request, the manufacturer can supply circuit diagrams, spare parts lists and other documents for use by qualified expert staff!

Useful details

Technical data

MDD class	IIa (93/42/EEC, Annex IX, Rule 9)
Protection class	I, Type B
CE certification No.	CE 0123

Rating

Input:	230 V ~ , 50 Hz, 0.4 A
Power supply:	Manufactured by Mean Well Enterprises Co., Ltd
Power supply model:	PD-25B
Fuses:	2xT1A250V
DIMDI No.	10-969 in accordance with UMDNS
Classification	UMDNS compression device intermittent
Code of the authority responsible	DE CA 57 (Upper Bavaria)

This device is intended for continuous use.
EMC tested in accordance with IEC 60601-1-2.

For information about potential electromagnetic interference and advice on how to avoid or minimize such interference, please refer to the attachment of this user manual.

Environmental conditions for transport/storage

- Temperature range: -20° C to 60° C
- Relative humidity: up to 95 % without condensation
- Ambient pressure: 700 hPa to 1.060 hPa

Environmental conditions during operation

- Temperature range: 10° C to 40° C
- Relative humidity: up to 95 % without condensation
- Ambient pressure: 700 hPa to 1.060 hPa

Useful details

Device dimensions

Height:	23 cm, overall
Depth without handle:	15.5 cm
Width:	35 cm
Weight:	4.3 kg

Warranty and guarantee

For the VADOplex system, a guarantee period of 1 year after delivery to the hospital or distributor is granted.

Before opening the device, unplug the power supply.

The device meets all essential requirements of the applicable EU guidelines.

Type B applied part.

Observe accompanying documents!

The product and its packaging may not be disposed of as household waste, but has to be sent back to the manufacturer for disposal.

Safety notes

Do not use the VADOplex system without having received a technical instruction on its use!

- Before switching the device on to using it for therapy, make sure to read and understand the manual and test the application of the device. Always be aware of the limits and risks when using the device. Make sure to observe all preventive safety and operation instructions attached to the device.
- Pay special attention when using the device on or in the presence of children.
- Do not use the VADOplex system for purposes other than those described in this manual.
- Never pull at the cable to disconnect the device from the power supply but always take the cable at its plug.
- Make sure to have the device switched off before leaving it unsupervised.
- When carrying, transporting and storing the VADOplex system, take care not to damage the system by dropping it or by transporting or storing it incorrectly.
- Make sure that the device is properly electrically grounded by ensuring that it is only connected to a grounded power supply fulfilling the applicable national and local electrical regulations.
- Do not use the VADOplex system outside or on wet surfaces.
- Do not use the VADOplex system in the vicinity of flammable anesthetic mixtures with air, oxygen or nitrous oxide. Make sure that the device is positioned on a solid and flat surface providing the necessary stability when in use.
- Parts of the device could burn or catch fire if exposed to an ignition source.
- Do not smoke during use of the VADOplex system and do not expose it to open fires.
- The VADOplex system is designed in a way protecting it from being affected by incontinence. Nonetheless, preventive measures to avoid the device from coming into contact with fluids should be taken.
- Always make sure to unplug the supply cable before maintenance and cleaning tasks are performed. Not unplugging it could cause electric shock or injuries.
- Only use the device if it is dry and only if your hands are dry to avoid the risk of electric shock due to humidity.
- Do not use the VADOplex system as a toy.
- The openings on the device rear side are for ventilation purposed and protect the device from overheating. It is thus not permitted to cover these openings.